2010

Louisiana.gov

State of Louisiana
IT Strategic Plan

Realigning IT

Louisiana Office of Information Technology

August 19, 2010

Table of Contents

“As states around the country come to grips with unprecedented fiscal stresses, the realization has started to dawn - ‘the way we’ve always done it’ isn’t going to work anymore. ”

Edward Driesse
Chief Information Officer

BOBBY JINDAL
GOVERNOR

PAUL W. RAINWATER
COMMISSIONER OF ADMINISTRATION

State of Louisiana

Division of Administration
Office of Information Technology

August 19, 2010

I am pleased to present Louisiana's 2010 IT Strategic Plan which addresses major initiatives designed to realign IT in Louisiana government on multiple levels.

First, we must quantify our baseline criteria for success.

Second, we must assure IT is aligned with the goals of the Governor and the Legislature to streamline government, ensure efficiency, and improve service delivery.

Third, we will reassess IT service offerings to provide shared services where there is benefit from centralization and consolidation, or alternatively, empower decentralized agency core business systems where decentralization makes better sense.

Fourth, we must improve upon IT project management to assure we are getting the greatest value for our spend.

Finally, we will address customer satisfaction by implementing a proactive and on-going education, feedback, and improvement process.

Given the status of our economy for the foreseeable future, we have our work cut out for us. I look upon the mandate to "do more with less" as an opportunity to challenge the status quo and realign our priorities and service offerings to ensure that technology powers what we provide to state government, citizens, and businesses. This plan will serve as our guide.

Edward J. Driesse
State of Louisiana, Chief Information Officer

EDWARD DRIESSE
CHIEF INFORMATION OFFICER

"On the topic of centralization versus decentralization, the two wrong answers are 100% and 0%. Our goal is to implement the optimal mix to provide Louisiana services."

Overview

The business of state government relies upon information technology (IT) more than ever before. But like most enterprises, the current recession has taken its toll on budget, staffing, and project priorities, making it difficult to juggle day-to-day operations, much less justify and implement investments in fundamental improvements for the long term.

We are faced with unprecedented budget shortfalls, while the need for constituent services, such as disaster food stamps, timely unemployment compensation, and integrated health care, are greater than ever. We are bulging at the seams with terabytes of data and the demand for transparency, yet duplication and system disparity constrain our ability to leverage data for optimal access, planning, and management. The ubiquity of computers and networks in all aspects of our lives has accustomed the public to 24x7 operation and access to state government information, resources, and services. At the same time, we are expected to guarantee security, privacy, and fail-safe disaster recovery.

The purpose of this document is to present the Office of Information Technology's plan to challenge the status quo and to implement enterprise shared IT services, supported by enterprise controls and policies.

The goal of shared enterprise services is simple and guided by common sense, i.e., to centralize utility-class services common to most state agencies (email, telephones, data network, data centers, servers, software, IT procurement, and technical support staff) and to decentralize agency support functions that are unique requirements of their core missions.

As a result, IT will provide:

- Economies of scale
- Enterprise view
- Reduced duplication
- Opportunities for integration across agencies
- Fair and equitable cost allocation
- High quality service

This is a multi-year plan with specific goals, but it is also intended to be a working document. As technology improves and requirements change, the shared-service/agency-services balance must be able to adjust. Through proactive management and vigilant oversight, Louisiana will be equipped with a sturdy but agile foundation allowing us to capitalize on new opportunities to move Louisiana forward.

Louisiana Office of Information Technology

Act 772 of the 2001 Legislature created the Office of Information Technology (OIT) and designates the Chief Information Officer (CIO) as the principal adviser to the governor and the executive cabinet on information technology policy, including policy on the acquisition and management of information technology and resources. The CIO is appointed by the Governor, reports to the Commissioner of Administration, and is charged with overseeing and Implementing the state master information technology plan.

Background

IT Strategic Planning must occur within the context of the State of Louisiana's overarching goals, incorporating the goals of the Governor and the Legislature, the authority of the Division of Administration, agency strategic business plans, and the authority vested in the Office of Information Technology.

Legislature

The Legislature is responsible for determining general policy for the state and its residents through the enactment of laws. It is not unusual for the Legislature to enact bills that have a direct impact upon IT funding, resources, and priorities. For example, Act 12 of the 2009 Regular Legislative Session "provides for a website to contain certain information concerning certain boards, commissions, and like entities" and requires the web site be operational by March 1, 2010.

Division of Administration

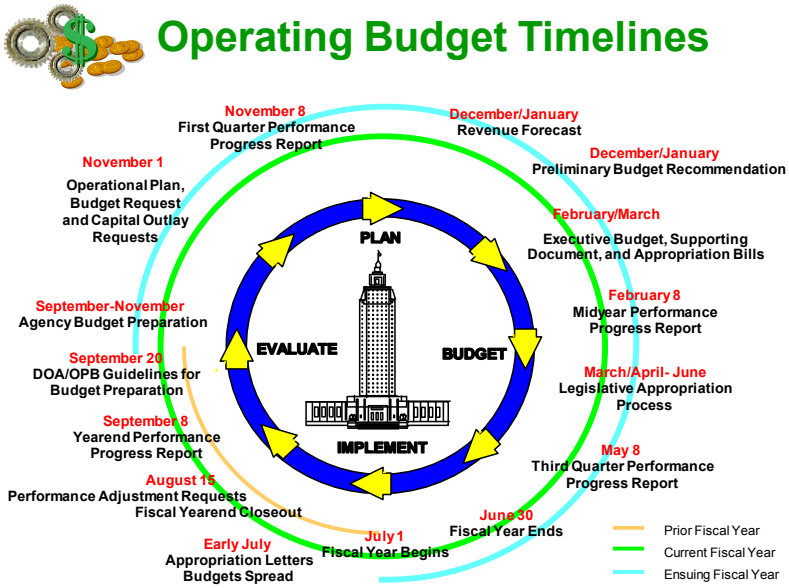
Unique among government departments, the Division of Administration (DOA) serves the people of Louisiana mainly by providing essential services to the whole of state government. As provided in Title 39 of the Louisiana Revised Statutes, "The functions of the Division of Administration shall comprise all administrative functions of the state in relation to the duties outlined in law." To accomplish these functions, the Division of Administration is comprised of 25 sections, some functioning as control-oriented entities and others as service-oriented entities.

Office of Information Technology

The Office of Information Technology (OIT) and the position of State CIO was established within the Division of Administration by Act 772 of the 2001 Legislature, and enacted in Chapter 1 of Title 39, RS 39:15.1 through RS 39.15.6. The CIO is the state's point person for matters related to IT and IT resources, including setting policies, standards, hardware and software deployment, strategic and tactical planning, acquisition, management, and operations in keeping with industry trends, both private and public. The CIO oversees several IT organizations within the DOA, acting as architect and primary executor of technical and business strategy for IT in Louisiana state government.

Agencies

Each fall, agencies prepare their budget requests for the following fiscal year (July 1—June 30). These requests fund the continuation of needed services as well as any new or enhanced services. These requests are reviewed by the Division of Administration for consistency with state and agency plans and compliance with the projected economic forecast. Those expenditures supported by the Office of Planning and Budget are incorporated into the Governor's Executive Budget recommendation which is presented to the Legislature for consideration.



The legislative lawmaking process and the budget process have significant impact on the priority and funding of agency and program missions, goals, and activities in any fiscal year. The resulting priorities and funding, in turn, significantly impact IT planning, both at the agency level and for statewide initiatives.

Best Practices

The CIO's staff use a variety of mechanisms to stay abreast of industry and government research and best practices, including:

NASCIO – The National Association of Chief Information Officers represents state chief information officers and information technology executives and managers from the states, territories, and the District of Columbia. NASCIO provides state CIOs and state members with products and services designed to support the CIO, stimulate the exchange of information, and promote the adoption of IT best practices and innovations.

NASTD - The National Association of State Technology Directors is a member-driven organization whose purpose is to advance and promote the effective use of information technology and services to improve the operation of state government. NASTD represents information technology professionals from the 50 states, divided into four regions, and the private sector. State members provide and manage state government information technology services and facilities for state agencies and other public entities, often including hospitals, prisons, colleges and universities. These members also play a strategic role in planning and shaping state government technology infrastructures and policies. Corporate members provide information technology, services and equipment to state government.

Louisiana's strategic IT goals and objectives are grouped into three major categories:

Administrative Service and Control

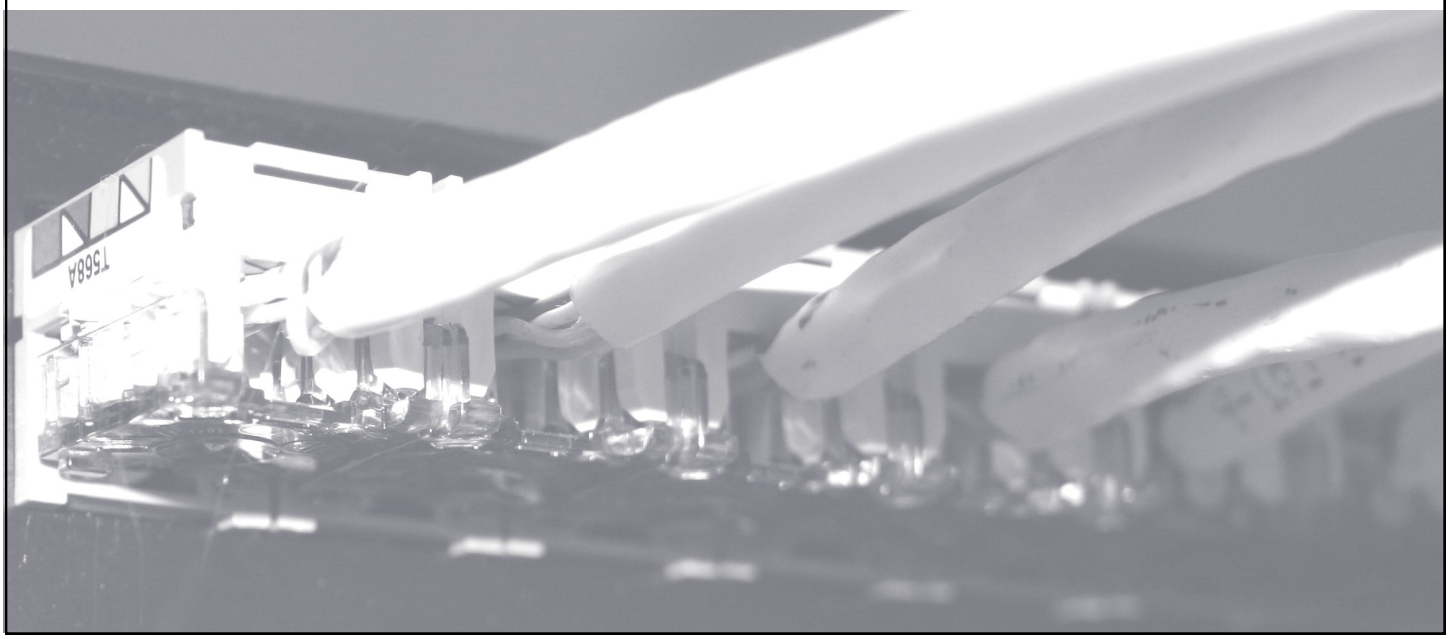
Enterprise governance functions usually provided by the CIO's staff

Enterprise Infrastructure

The foundational components for sharing and interconnecting state IT assets, such as data centers, networks, and email

Enterprise Applications

Applications that are needed by all agencies (such as HR, Payroll, and Accounting) which are most cost-effective when administered centrally



Administrative Services and Controls

The Office of the CIO has purview over all information technology systems and services for agencies in the executive branch of state government. This means dozens of state agencies and over fifteen hundred IT employees are governed by the strategy, standards, and policies established by the Office of Information Technology (OIT).

Administrative services and controls are the means by which the CIO oversees and coordinates the realization of his goals for centralization, consolidation, shared services, cost-effective procurement, performance and accountability, and project governance.

Goals :

ONE

- Modernize and improve procurement practices for IT hardware, software, and related services.

TWO

- Provide customer service that meets or exceeds expectations.

THREE

- Implement governance that assures timely and cost-effective delivery of value-added solutions.

FOUR

- Apply key metrics to manage and improve IT services across agencies.

FIVE

- Establish governance policies that support enterprise initiatives.

Administrative Services and Controls

Realigning IT

Goal One:

Modernize and improve procurement practices for IT hardware, software and related services.

Due to the evolution of converging technologies and the complexities and churn rate in contract itemization, what was once "clear" with regard to procurement law, has become murky at best and conflicting at worst, leaving the state subject to risk and waste. In fiscal year 2008-2009, over $400 million was spent on IT hardware, software, contracts, and salaries. The goal of providing the most efficient end-to-end management of all IT assets warrants a fresh look at IT procurement practices and statutes, many of which were established prior to the emergence of today's technologies.

Objectives:

2010: Revise the process for requesting, reviewing, and approving the procurement of various IT technologies, including volume pricing agreements for software.

2010: Coordinate with the Office of Contractual Review and the Office of State Purchasing to make the process for IT bids and contract approvals more efficient.

2010: Establish an IT Contract Management Strategy, including policies and procedures.

2012: Develop a new, single procurement statute to include IT systems and services for the executive branch of state government.

CIO Guiding Principles

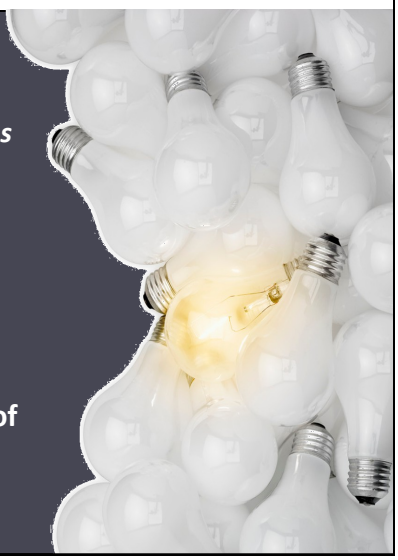
Focus on building an IT strategy which supports deployment of value added solutions to meet agency core missions

Move from "custom" applications to "off-the-shelf" packages and decision support tools

Provide value for cost

Focus on providing IT service delivery effectively and efficiently

Rationalize the portfolio of applications, projects, and initiatives



Goal Two: Provide customer service that meets or exceeds expectations.

With information technology as an enabler for constituent services, "service" is at the core of our mission. Although public entities are not typically "competing" for customer loyalty and sales in the same sense as the commercial world, the quality of customer service is nevertheless significant.

Poor customer service can result in hidden costs—lower call center volume, wasted time, potential processing or usage errors, negative word of mouth, and loss of trust.

Poor customer service can result in lost customers—roadblocks to constituents such as vendors interested in doing business with the state and agencies that seek alternative ways of accomplishing their mandates.

Poor customer service can result in lost opportunities–for citizen-centric applications such as Louisiana.gov which provides a gateway to information, resources, and services that the state provides as well as constituents, such as legislators who have influence on agency priorities and budgets.

Quality customer service means more than "delivery." It means delivering value for cost, with a customer-centric view, and without regard for organizational boundaries.

Currently, there are no state standard processes in place to measure IT customers' satisfaction with the value of the enterprise IT services they receive. Without baseline metrics, there is no basis to assure ongoing improvement.

In 2009, OIT established a formal customer satisfaction program within DOA to encompass OIT lines of business. An IT performance index was established and progress is tracked quarterly. Over time, this program will be broadened in scope, with policies and guidelines established for all IT sections statewide.

Objectives:

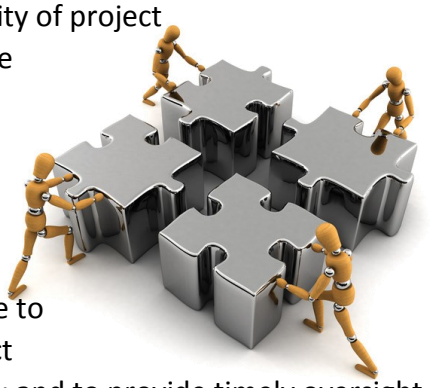
2010: Implement IT Customer Satisfaction performance measurement.
2010: Design and distribute an IT newsletter as a means to improve communication between OIT sections regarding key IT initiatives.
2010: Implement DOA IT Customer Satisfaction program encompassing all OIT sections, and including performance tracking, reporting, employee training, and employee recognition.
2011: Expand Customer Satisfaction program to statewide IT community.

Goal Three:

Implement governance that assures timely and cost-effective delivery of value-added solutions.

Although project management is a mature discipline in the IT industry, its use and success varies among Louisiana state agencies. Shortcomings are typically due to a variety of factors, including unclear functional requirements, lack of user buy-in, excessive customization versus "off the shelf" alternatives, and the abdication of responsibility to vendors, among others. In a properly managed project, however, the underlying factors that will contribute to failure in project implementation can often be detected early enough to take timely, corrective action.

Key projects require IT involvement from beginning to end. Key stakeholders of major projects need a mechanism to assess the progress of project activities, to assure the quality of project deliverables, and to reduce the risk of project failure. While OIT has made significant strides in enterprise oversight by instituting the IT-10 review process, there is no enforced tie-back to agency business and IT strategy, and no on-going review process, which is critical to ensure responsible governance of the state's IT investments. The solution consists of three tenets: to promote project management staff development among the agencies to ensure that dedicated, highly qualified resources are available to manage critical IT projects; to create a consistent framework for IT project managers to utilize in delivering their projects on-time and within budget; and to provide timely oversight and visibility to key stakeholders into the status of critical IT projects.



OIT is addressing these needs through the implementation of a statewide enterprise Project Management Office (PMO). The PMO will provide guidance and resources for agency project managers to assist them in the successful management and delivery of critical IT projects, while assuring "no surprises" for executive management with regard to key projects. The PMO will also establish policy and set goals with regard to staff development to ensure agency staff possess adequate foundation in the concepts and best practices of the project management discipline.

Objectives:

2010: Plan and implement a project management organization within OIT to assist state agencies in the management and delivery of IT Projects, in terms of schedule, costs, scope and quality.

2011: Leverage the Portfolio, Program, and Project Management Maturity Model (P3M3) as the framework to assess agencies' current maturity level of project management practices.

2012: Improve the statewide P3M3 maturity by one level across state agencies.

2013: Establish enterprise program management processes across all executive branch departments.

Goal Four: Apply key metrics to manage and improve IT services across agencies.

Over the past 20 years, the state's IT infrastructure has been largely a decentralized enterprise with each individual department responsible for managing its respective IT operations. This responsibility has included hardware, software, state personnel, contracts, data centers, network, application development and maintenance. As the hardware and software industry has rapidly expanded in size, scope and complexity, each state department has independently attempted to keep up, resulting in multiple data centers, siloed applications, and duplicated services.

In 2009, the state's IT resources across all departments exceeded 1,900 positions, IT expenditure exceeded $519 million, and resulted in significant disparity between agencies with regard to IT funding priority, management, staffing, and technical expertise. There is currently no standard process to collect and analyze key performance metrics such as IT expense to IT budget ratio, IT staff-to-customer support ratio, cost per user, etc. Only after we establish a mechanism for consistent collection and calculation of real costs can we have meaningful evaluations of alternative sourcing models and set measurable goals for improvement.

OIT will identify key metrics, establish an on-going process for consistent data collection and analysis, and recommend adjustments necessary to support the overall strategic objectives.

Objectives:

2010: Perform IT Baseline Spend Analysis.
2010: Establish Agency Score Card for on-going data collection, tracking, and assessment.
2011: Influence agency budget and staffing resources based upon actual metrics and strategic objectives.

There are two types of metrics: "What am I doing?" and "How am I doing?" The key to success lies in establishing the relationship between "What I am doing" and "How I am doing."

Gartner

Administrative Services and Controls

Realigning IT

Goal Five: Establish governance policies that support enterprise initiatives.

The people of Louisiana have entrusted us to manage their resources in the most prudent and responsible manner; therefore, we are required to treat our information technology resources as statewide assets that must be governed by sound management and fiscal policy. This will allow us to move ahead, while we tighten the belt in difficult fiscal environments. Implementing an enterprise perspective requires agreement on priorities and coordination of initiatives that may impact each other. By aligning agency initiatives with enterprise policies, economies of scale are achieved while providing for agency core missions.

OIT oversees the implementation of information technology policies which support Louisiana's strategic initiatives. Progress to date includes:

- Implemented an enterprise policy framework to facilitate the development and management of policies and standards.
- Published enterprise shared services policy, enterprise governance policy, and enterprise data center standards.

Objectives:

2010: Manage ongoing evolution and update of enterprise security policies and standards.

2010: Conduct ongoing review and oversight to support effective enterprise procurement practices.

2011: Publish standards and procedures to support the evolution of enterprise messaging.

2011: Continue evolving project and portfolio management practices, guidelines, and policies that drive the development of new and expanded services.

2011: Implement network standards, guidelines, and policies as required to support evolution of the statewide network.

2011: Develop and update guidelines and templates for agency use in disaster recovery and Business Continuity Planning.

In addition to the creation of the Office of the CIO, Act 772 also established several boards to represent agency interests, and to advise and support the CIO:

The **IT Advisory Board** is composed of agency CEO's and is responsible for advising the CIO on approaches to coordinating information technology solutions among Louisiana state government entities and providing a forum for the discussion of emerging technologies that enhance electronic accessibility to various publicly funded sources of information and services.

The **Technical Advisory Group** (TAG) serves as the technology counterpart to the IT Advisory Board, providing *advice* and support as requested, and provides technical resources to assist the CIO in the development and implementation of statewide information technology plans, policies, architecture, standards, and guidelines.

A third group whose members have yet to be appointed, the **Postsecondary Education IT Council**, is envisioned to advise and assist the CIO specifically with respect to issues, policies, strategic planning, management, and operations relative to information technology for postsecondary education.

The existence and proactive participation of these boards functioning as a team to advise the CIO are crucial to the development of a new mindset for IT service delivery with a statewide perspective.

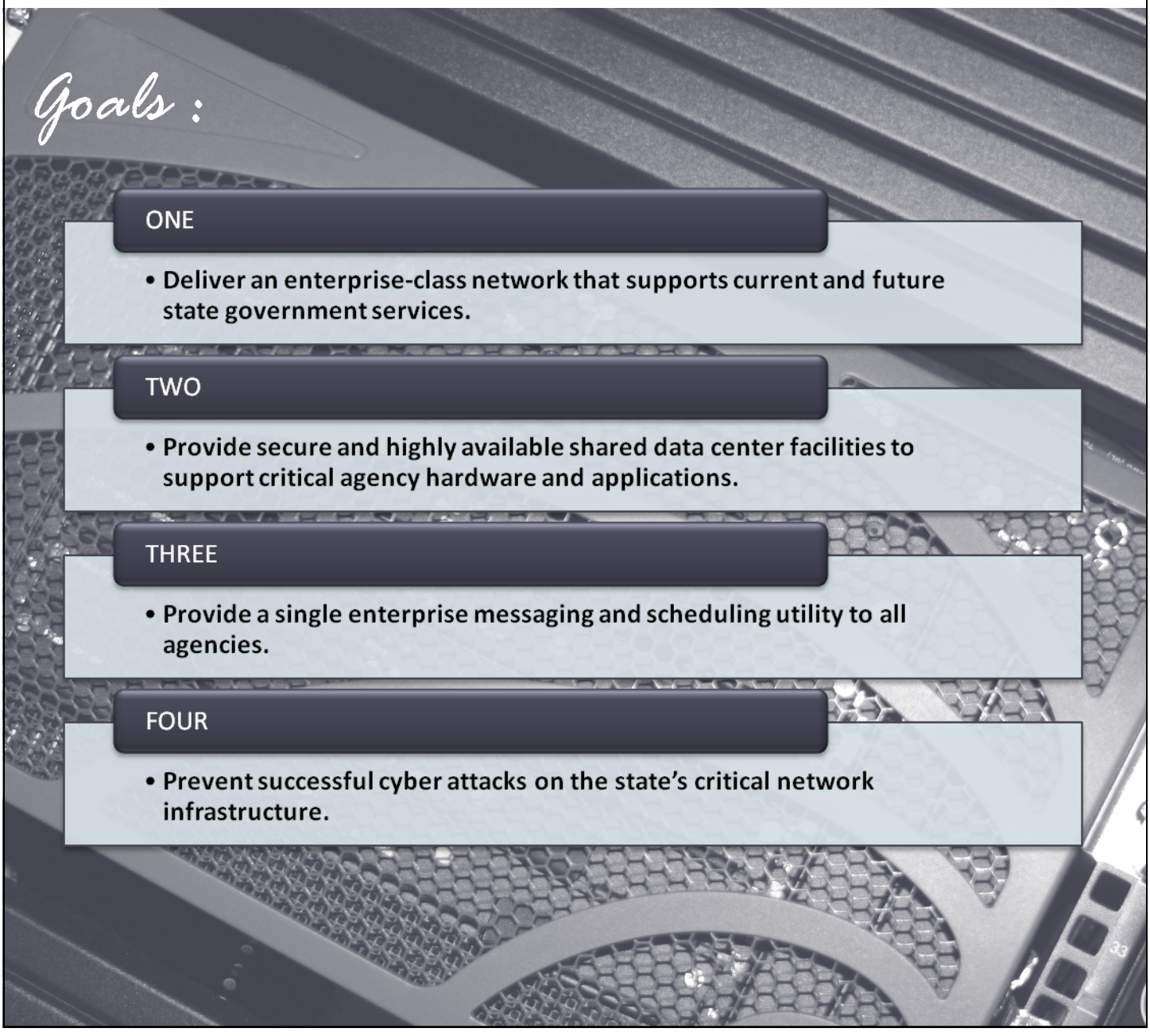
Enterprise Infrastructure

Realigning IT

Discussions about centralization and consolidation inevitably result in a tug-of-war on the topics of increased efficiency versus loss of control. But decentralized control can create silos, resulting in costly duplication, limited scalability, varying levels of service quality, and waste.

The best of both worlds can be gained with the right mix of shared infrastructure services.

With a solid technical foundation, business processes can leverage common hardware, software, and personnel, resulting in the ability to plan for the enterprise long term, and gain economies of scale to avoid or reduce costs.



Enterprise Infrastructure

Goal One:

Deliver an enterprise-class network that supports current and future state government services.

The state's enterprise network is the essential and robust utility-class infrastructure for shared services and agency applications critical to the state's business services. The Office of Telecommunications Management (OTM) has historically established statewide contracts to support the IT telecom and data transport needs of state government. It is responsible for management and operation of Local Area Networks (LANs) and Wide Area Networks (WANs), including the Louisiana Secure Intranet (LSI), a utility class, shared enterprise LAN that serves tenants in the Baton Rouge Capitol Park.

There are currently over 12,000 ports to 16 departments participating on the LSI. Agencies are in various stages of network infrastructure consolidation: from partially consolidated, to fully consolidated, from willing but unable, to completely resistant.

As IT consolidation expands beyond the Capitol Park, traditional networking architectures and related services, OIT will address the feasibility/viability, cost-benefits and best practices for help desk consolidation.

OIT will address concerns about costs and services in order to ensure the most cost-effective and reliable delivery of these mission critical enterprise class IT network services. This entails on-going review of the organization, lines of service, rates, and rate basis to assure efficiency, eliminate non-strategic services, and minimize customer costs.

Objectives:

2010: Implement the State's next generation of statewide broadband network. The goal is to deliver a scalable shared services platform with guaranteed performance levels (SLA) for the transport of voice, video and data services.

2011: Complete the conversion of all agencies physically connected to the Virtual Campus, addressing data dial tone for headquarters locations, data center consolidation, WAN and remote LAN support, personnel, and funding.

2011: Complete formal RFP processes, benchmark options and make best value determinations to support implementation of next generation enterprise platforms for contact centers, telephony, and unified messaging.

2012: Complete the conversion of all remaining candidates for LSI, Data Dial Tone, and related data center consolidation.

Goal Two:

Provide secure, highly available shared data center facilities to support critical agency hardware and applications.

The ubiquity of computers in all aspects of life has accustomed the public to require that they operate continuously, like a utility. The deployment of Web views to the public and the transactional nature of many systems have increased the demand for reliable servers that are available all of the time. Email and instant messaging have grown from being a quick way to ship documents to a real-time means of communications and collaboration during crises. State and federal auditors have raised the bar for systems, requiring that adequate resources and measures be in place to ensure the confidentiality, integrity and availability of information.

To ensure that the services and information needed by departments and citizens are available without interruption, the state has established shared data centers to provide secure and stable hosting environments. Because these facilities are shared, critical resources for departments and higher education, planning and management (operation, maintenance, and customer management) must be done at the enterprise level. The increasing demands of customers against limited resources and the competing pressures for availability, cost-effectiveness, etc. must be continuously evaluated.

Most of the state IT infrastructure is concentrated in Baton Rouge and on the campuses of the larger universities. While this allows easy geographic access for most departments, it means that many systems are susceptible to an isolated geographic disaster. Departments, schools, boards, and other branches of government have all identified needs for primary facilities, back-up storage, and cold, warm, and hot sites for processing outside of the existing locations. The increasing needs for security within multi-tenant facilities mandate more formal methods for security be designed and employed such as card access, intelligent video, locking racks, criminal history checks, secure shredding of media, etc.

Objectives:

2009: Publish new policy on Enterprise Data Centers requiring their use for critical systems.
2009: Relocate agency assets to shared centers where resources are available.
2009: Renew outsourced (Venyu) managed hosting service in the Baton Rouge metro area.
2009: Establish data replication and backup facility at LaTech for agency use.
2010: Establish oversight structure for data center management and planning.
2010: Enhance reliability of Information Services Building electrical power.
2011: Award contract for a managed hosting service provider in North Louisiana.
2011: Complete design of additional high-availability space, power and cooling to Department of Public Safety Data Center.
2012: Begin construction of renovations to the DPS Data Center.

Enterprise Infrastructure

Realigning IT

Goal Three: To provide a single enterprise messaging and scheduling utility to all agencies.

Email and scheduling are now considered core utility services required by workers to communicate on the job and to effectively manage their time. In addition, email provides inter-agency meeting management; it is also a key integration point for enterprise applications, such as HR/Payroll automated leave requests and approvals.

Email customer expectations are high and the quantity of message volumes continues to climb. Email administration entails ever-increasing server hardware and software requirements, uptime expectation, anti-virus and spam protection, security, and archival demands. It makes little sense for each state agency to use its limited resources to provide this service. Consolidation would lead to more efficient use of hardware, software, and personnel.

Implementation of statewide email as a DOA line of service has been underway since 2004. Buy-in has been slow due to client-side hardware and software upgrade requirements, budget limitations, and general resistance by individual agencies to relinquish control of this key service.

As of 2010, over 28,000 mailboxes are provided as a single, shared service across agencies. Full implementation is estimated to be over 35,000.

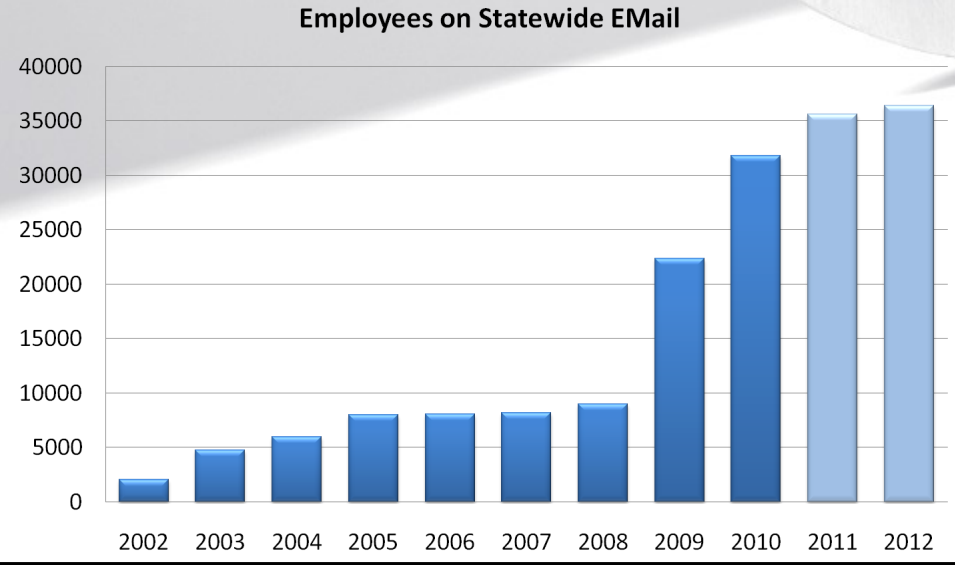
Objectives:

2010: Convert Department of Social Services, Office of Group Benefits, Louisiana School for the Deaf, Louisiana School for the Visually Impaired, Special School District, and Wildlife and Fisheries.

2010: Offer centralized archiving line of service to allow agencies to increase storage limits, meet email retention requirements and eliminate personal folder problems.

2010: Reduce billing rates based on economies of scale.

2011—2012: Complete the conversion of all state agencies to statewide email.



YEAR	STORAGE	COST/USER
2003	50 MB	$16
2004	50 MB	$15
2005	50 MB	$14
2006	50 MB	$14
2007	50 MB	$6
2008	50 MB	$6
2009	50 MB	$6
2010	100 MB	$6
2011	100 MB	$5

Goal Four:

Prevent successful cyber attacks on the state's critical network infrastructure.

Most enterprise networks see millions of cyber attack attempts annually, but fortunately, only a small percentage of these attempts are successful. Sophisticated cyber criminals are not just targeting our computer systems; they are seeking to gain information stored and transmitted over our networks. Whether the source of an attack is an insider or an outsider such as a cyber criminal or cyber terrorist, the potential consequences are the same: loss of sensitive information, loss of revenue, interruption of business processes, and loss of constituent confidence. These threats to our state's networks are continually increasing and gaining in sophistication.

In an effort to prevent or mitigate cyber attacks, OIT provides enterprise governance through the development and publication of security policies and standards that are based on industry best practices. Additionally, OIT provides timely information (proactive) regarding potential cyber attacks and seeks to develop a rapid response capability (reactive) to assist agencies with mitigation after a successful cyber attack.

Objectives:

2010: Track and report quarterly performance on the percentage of attacks from the internet that were successfully blocked. Target is 95%. OIT successfully blocked over 95% of attack attempts in fiscal year 09-10.

2010: Review/update existing security policies.

2010: Continue to utilize the statewide Information Security Committee for input on security policies.

2010: Continue to utilize advanced intrusion prevention techniques that provide early warning/blocking capabilities.

2010: Automate a notification process to state agencies regarding potential cyber threats within their respective networks.

2011: Partner with the Governor's Office of Homeland Security and Emergency Response (GOHSEP) to train and staff a Computer Security Incident Response Team (CSIRT).

2011: Review security standards.

2012: Partner / participate with GOHSEP to utilize the Carnegie Mellon Software Engineering Institute CSIRT model for training and certification of CSIRT members.

2012: Partner / collaborate with the Cyber Assurance Defense Center (CADC) located in Bossier City, LA in order to design and build an early warning system for cyber attacks.

Enterprise Applications

An enterprise approach to common applications aims to provide enhanced control and transparency across state government, improve efficiency of business processes, and eliminate the pitfalls of data and process redundancy across a myriad of disjointed systems. Where it makes financial and organizational sense, enterprise applications will replace outdated technology and siloed legacy enterprise systems with cost-effective, centrally-administered systems that are accessible across organizations.

By implementing these new solutions the state will eliminate the costs associated with continued development and support of a multitude of departmental systems, resulting in improved operational efficiency.

Goals:

ONE

- Provide effective enterprise applications to support statewide administrative functions and facilitate transparency of state government finances and operations.

TWO

- Consolidate and centralize Enterprise Content Management (ECM) systems and e-Government delivery tools for cost savings and efficiencies of operation.

THREE

- Improve delivery of information and services through effective e-Government offerings.

FOUR

- Establish multiple sourcing models to provide the most cost-effective application delivery options.

"Given our current fiscal challenges, the Legislation which created OIT is more meaningful now than ever. To be more cost effective, we must manage IT from a statewide perspective."

Ed Driesse, CIO

Enterprise Applications

Realigning IT

Goal One:

Provide effective enterprise applications to support statewide administrative functions and facilitate transparency of state government finances and operations

Many statewide administrative applications are approaching technological obsolescence and do not meet today's requirements for efficient business performance and transparency of state finances and practices. In addition, silos of aging departmental administrative applications remain, further complicating the picture with inconsistent processes and data.

In 2008, work was begun on the LaGov ERP project to provide one business system to the State of Louisiana. The new LaGov system is a strategic business initiative for the state, using technology as a tool to provide more efficiency, transparency and accountability. This investment to streamline business systems empowers state executives and employees to make decisions by providing instantaneous access to accurate, enterprise-wide, and real-time information.

In 2008 LaTrac, the state's Transparency and Accountability Portal and Online State Spending Database was launched to provide a public view into state government expenditures. LaTrac has continued to be enhanced to provide citizens with easily accessible and updated information on state government performance, contracts, grants, and federal stimulus tracking, with additional functionality planned.

Objectives:

2010: By November, 2010, implement Phase I of LaGOV ERP with the following functions as a pilot for DOTD-only: General Ledger and Budgetary Control; Accounts Payable; Accounts Receivable and Billing; Revenue Accounting; Cost Allocation; Grants; Projects; Procurement; Contract Management; Warehouse inventory; Asset Management; Materials Management; Fleet Management; Facilities Management; DOTD/LINEAR ASSETS (LA); FHWA Billing; and AASHTO Integration.

2010: Enhance LaTrac to provide information on 3rd party expenditures, dedicated funds, and employee salaries.

2010: Continuously evaluate and update end user training on enterprise applications to empower state managers as information workers for improved decision-making.

2011: Develop a forward looking design and approach for an enterprise directory.

2013: By July 1, 2013, implement Phase II of LaGOV for budget development functionality and conversion of all remaining agencies.

LAGOV WILL

1. **Improve the quality and timeliness of information** by eliminating manual reconciliation associated with maintaining duplicate data in multiple systems.
2. **Provide better control of operational expenditures** by streamlining and automating the budget development process for the agencies and OPB by eliminating redundant entry and manual spreadsheet reconciliation.
3. **Enhance transparency and accountability** by having all agencies' information in one integrated system.
4. **Reduce risk** by replacing obsolete technology and aging systems, addressing functional weaknesses in existing systems, reducing the proliferation of stand-alone systems.
5. **Improve efficiency and effectiveness** by supporting web-enabled self-service for State employees and vendors conducting business with the State.
6. **Enable informed decision making** because LaGov's real-time data and reporting functionality will provide the leadership of the State of Louisiana with the tools to make informed decisions for the State, as an enterprise.
7. **Manage and expedite agency cash flow** by simplifying our ability to implement control measures to capture operational expenditures when using the LaGov Financial System.

Goal Two:

Consolidate and centralize Enterprise Content Management (ECM) systems and e-Government delivery tools for cost savings and efficiencies of operation.

Increasingly, state agencies are relying on technology solutions to manage the volumes of information generated in the conduct of their business. With the need to comply with a myriad of regulations and documents, the effective organization of key documentation for quick retrieval becomes critical. Enterprise Content Management (ECM) applications address these needs, and agencies are turning to a variety of products of this type to manage documents, web sites, communications and other forms of electronic information. The result is that different products proliferate across the state, along with the hardware, staff, and additional software to support them. Duplications abound, yet agencies are reluctant to relinquish their control in order to consolidate these applications.

The same can be said of other tools used to support e-Government, tools that present data and services to the public in the most intuitive and useful manner. A prime example of this is GIS software and data. While some GIS software products need to remain on the desktops of users, much could be gained by consolidating some of the server software and data stores in an open and centrally maintained environment. Though the Louisiana Geographic Information Center, managed by OIT, and the Louisiana Map Web site have already made significant progress in cataloging and providing access to GIS data, there is potential for even more consolidation and greater savings.

Consolidation of web-enabled ECM and GIS software on centrally maintained servers could yield significant savings in license and maintenance costs, as well as hardware costs. Consolidation will also provide a consistent user interface, resulting in improved ease of use and support across agencies. Centralizing software administration and basic support, while delegating support of agency specific repositories and processes, will free agency users to concentrate on their mission critical services, rather than the IT functions supporting those services.

Objectives:

2011: Continuously evaluate and update end user training on ECM applications to empower state managers as information workers for improved decision-making.
2012: Centralize and consolidate document management software and services.
2012: Consolidate GIS data and software where feasible.
2012: Promote sharing of GIS data by maintaining a catalog and easy access to data stored outside the central repository.

Goal Three: Improve delivery of information and services through effective e-Government offerings.

Through the use of Internet technology as a platform for exchanging information, providing services and transacting with citizens, businesses, and other arms of government, e-Government offers the greatest opportunities to:

- Facilitate citizen access to state government information and services;
- Improve state government efficiency and effectiveness;
- Minimize duplication of effort for citizens and state government entities; and
- Improve state government's responsiveness to citizens.

New technologies and practices such as mashups, geographical information views, data mining and web 2.0 social web sites have raised citizen expectations for the nature of e-Government delivery. Integration and consolidation of data across jurisdictions and domains of services, systems and applications necessary to achieve a seamless citizen-centric government are key to meeting those expectations.

At present, the web sites of over 120 agencies, 306 boards and commissions, and 352 related other entities are accessible through the Louisiana.gov State Portal managed by OIT. Nineteen online services can be reached with one click from the homepage, with 280 online services accessible through the Louisiana Services Directory and individual agency web pages linked to Louisiana.gov. The ASK Louise database provides a rich searchable knowledge base of information, resources, and services that the state provides. When answers to specific questions are not provided by the ASK Louise database, visitors can logon and request assistance. Over a hundred questions monthly are entered in this manner, resulting in a single response resolution rate of over 90%. Geographic data and services from multiple sources are consolidated on the LouisianaMAP GIS portal and the Louisiana Geographic Information Center (LAGIC) web site.

While these OIT initiatives, along with many at other state agencies, have laid the groundwork for e-Government in the state, much opportunity remains. Current industry practices dictate regular review of services for online delivery, and leveraging of enterprise software technologies to facilitate that delivery wherever possible. Statewide policies and standards, as well as availability of enterprise software tools, are required to build a stronger foundation for the development of efficient and consistent e-Government services within the state that can be produced in a timely and productive fashion. Oversight at a statewide level will be critical to ensure ongoing compliance with established policies for maximum benefits and significant cost savings to be realized with e-Government initiatives.

Objectives:

2011: Establish policies and standards for e-Government delivery, methodology, tools, interfaces, and support.

2011: Redesign the Louisiana.gov State Portal for better access to all government services.

Goal Four:

Establish multiple sourcing models to provide the most cost-effective application delivery options.

With the multitude of sourcing models currently available, careful thought must be given to the appropriate model for any given IT application or online service. No longer is in-house development always the optimum approach. Costs and benefits of multiple options must be analyzed.

Outsourcing and managed hosting are already viable alternatives, and new models continue to evolve. Cloud computing, in which dynamically scalable and virtualized resources are provided as a "service" over the Internet, has tremendous promise, since users need not have knowledge of, expertise in, or control over the technology infrastructure in the "cloud" that supports the environment. However, issues related to security and privacy need to be addressed.

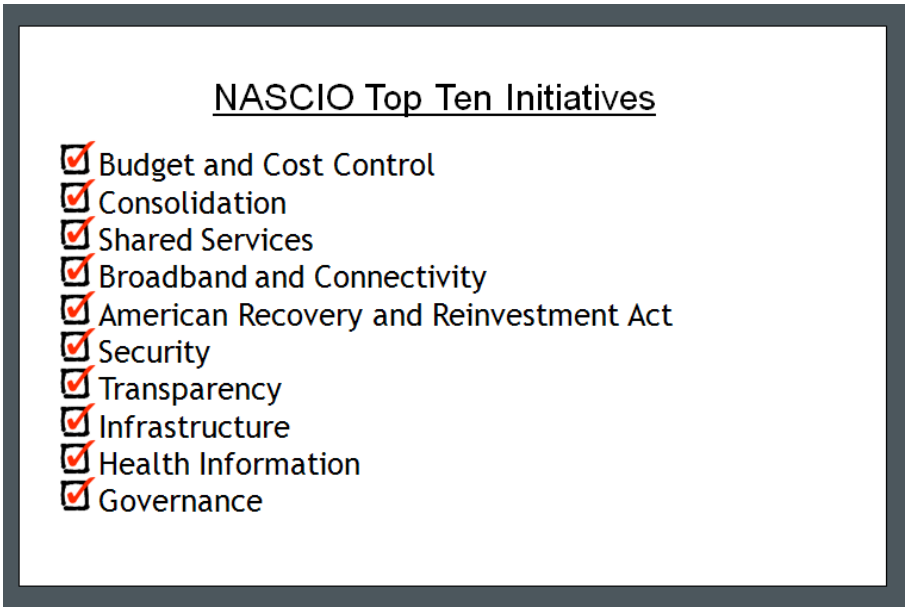
OIT will study and document alternate sourcing models to facilitate the selection of the best fit for the management and delivery of IT solutions.

Objectives:

2010: Outsource Louisiana Payment Gateway.
2010: Implement hosting and support of linear assets application for LaGov project.
2011: Proactively research and benchmark cloud-based solutions as potential cost-savings alternatives to established offerings.
2011: Establish a culture of competition between alternative sourcing models (in-sourced, out-source, open-sourced, and cloud offerings) to provide the most cost-effective delivery options over five-year terms.

"Each year NASCIO conducts a survey of the state CIOs to determine the top priorities for state governments. Louisiana's IT strategy is on target."

Edward Driesse
Chief Information Officer



Summary

Technology facilitates almost every government service today. From allowing citizens to renew their driver's license over the Web, to filing state taxes online, to booking a campsite at a state park, to pre-applying for disaster food stamps, to searching for sex offenders by area code. Technology is what makes all of these possible.

The Louisiana Division of Administration purchased its first Univac computer in 1968 under Governor John McKeithen, and the first PC's were purchased in the mid 80's. Like most state agencies, DOA provided full-service in-house staffing to decide which hardware, software, and networking infrastructure would be purchased and deployed. By 2000, as technology evolved, the state had invested in multiple large data centers, many disparate email systems, and thousands of computer applications, most of which did not interact with each other. The programmers who built these systems continue to age and retire, and many of these systems are being held together with "rubber bands, scotch tape and a prayer." And now, as states around the country come to grips with unprecedented fiscal stresses, the realization has started to dawn— the "way we've always done it" isn't going to work anymore.

It is time for Louisiana to transform the way we manage technology. It is time to:

- Consolidate systems and operations where cost-beneficial.
- View state technology with an enterprise perspective, rather than an application-centric perspective or an organization-specific perspective.
- Address the cultural changes that must occur in parallel with the technical changes so that people, processes, and technology all advance in unison.
- Establish trust, professionalism, and constant communication between state agencies and the Office of the CIO.
- Establish the metrics by which improvements will be measured.
- Consider IT staff as essential assets and train and develop them accordingly.
- Harness the vast array of data available in the state's disparate systems to make the systems work for us, rather than vice versa.
- Assure that state employees, state business partners, and citizens obtain value from our services and are satisfied with outcomes.

It is up to us to ensure that the people, processes, and technology provide the quality services our citizens deserve and the flexibility that state business needs. This strategic plan will serve as our map.

"Over the next few years we must find a way to do more with less. Our very future depends on it."

Edward Driesse, Chief Information Officer

Edward J. Driesse
Chief Information Officer

Louisiana Office of Information Technology

Mailing Address

P.O. Box 94095

Baton Rouge, LA 70804-9095

Physical Address

Claiborne Building

1201 North Third Street, Suite 2-130

Baton Rouge, LA 70802

Phone: (225) 342-7105

Fax: (225) 219 - 4994

CIO@la.gov

www.louisiana.gov